Bay Area Water Supply & Conservation Agency

BAWSCA Comments on

Tuolumne River Trust Report "From the Tuolumne to the Tap", dated July 2007

While we agree with some of the information in the Tuolumne River Trust (TRT) and Pacific Institute reports, the reports also include errors and incomplete or misleading statements, several of which are included in the July 31, 2007 Chronicle news article. For the record, and for the benefit of policy makers and interested parties, the following bullet points correct or clarify that information.

The San Francisco Public Utilities Commission (SFPUC) serves water to the City and County of San Francisco and to "wholesale customers" comprising 27 cities, water districts and water companies. These wholesale customers are BAWSCA's members and serve the 1.7 million residents, businesses, and community organizations in Alameda, Santa Clara and San Mateo Counties.

"Wholesale customers outside of San Francisco are driving 100% of the anticipated increase in demand for water." (TRT, Executive Summary, p. vi)

- This statement is inaccurate and misleading. The projected population and employment growth in San Francisco contributes to the projected increase in demand for water.
- If San Francisco's population and employment were static, its projected demand for water would be lower than it is today due to increased water conservation and new supplies.
- In San Francisco, the increased water needs for the additional population and employment will be offset by projected water conservation and new water recycling in San Francisco.
- Population and employment served by wholesale customers are also projected to increase.
- By 2030, therefore, the total demand for water by wholesale customers is projected to increase 22% after conservation is implemented, and the amount they purchase from San Francisco is projected to increase 22%.[i]
- In 2030, the wholesale customers will satisfy 11% of their demand through water conservation and 29% through additional wastewater recycling and other sources of water.[ii]

"Outdoor water use alone is driving 60% of the anticipated increase in demand for water." (TRT, Executive Summary, p. vi)

- This statement is inaccurate and misleading. The increased need for water is not driven by outdoor landscaping alone.
- "Outdoor Water Use" – The definition of this term for this study is "seasonal use" and includes water used for cooling purposes, not just landscape irrigation, including businesses, residents, and institutions.
- Seasonal water use varies around the Bay Area. The climate in San Francisco is very different than the majority of service area – cool and foggy vs. warmer with no fog.
- "Seasonal Water Use" represents 55% of total demand increase in the wholesale service area (not 60%).[iii]

"..the PUC erroneously projected uniform growth in various industries." (Cooley, Chronicle, 7/31/07)

- Incorrect - The projections of business and industrial growth are not uniform over the region.
- The projections of business and industrial growth, and associated water needs, reflect the current and projected characteristics for each of the 27 individual service areas.
- Business is becoming more water-efficient. Jobs are projected to grow 31% by the year 2030, while water use by business is only projected to increase 25%.[iv]

"Their [SFPUC] studies excluded conservation efficiency and recycling measures that could eliminate the need to divert more water from the Tuolumne by at least 74%." (TRT, Executive Summary, p. vi)

- This statement is inaccurate and misleading. The SFPUC studies included all potential conservation and recycled water projects.
- The studies examined the nine quantifiable California Urban Water Conservation Council Best Management Practices for Urban Water Conservation plus an additional 23 other water conservation measures. [v]
- The baseline projected demand includes recycled water projects that were known to be feasible. Other recycled water projects were identified but not included in the baseline water use projections if their feasibility was not yet known.

***"Per capita water use is projected to increase for the wholesale customers,* further indicating that they lack effective conservation programs." (TRT, Executive Summary, p. vi)**

- This statement is inaccurate and misleading. Projected gross per capita water demand, including water used by businesses and industry, is expected to stay about the same in 2030.[vi]
- Gross per capita water demand was 162 gallons per capita per day (gpcpd) in 2001 compared to projected use of 160 gpcpd in 2030. This actually represents a decrease of 2 gpcpd or 1%.[vii]
- The per capita water demand for residential uses will continue to decrease.
  - Residential per capita water demand of the wholesale customers is projected to decrease 3%, from 89 gpcpd in 2005 to 86 gpcpd in 2030. [viii]
  - Today's residential per capita water use is 15% less than before the drought that began in 1986 and 23% less than before the drought of 1976-1977. [ix]
- Residential per capita water use of wholesale customers is less than in other parts of California, and is less than the average for the San Francisco Bay Region as a whole. See Table 1 below.

Table 1

Region	Total Residential Per Capita Demand (gpcpd)
Colorado River[1]	338
South Lahontan[1]	265
Tulare Lake[1]	242
San Joaquin River[1]	220
South Coast[1]	132
North Lahontan[1]	133
Sacramento River[1]	177
Central Coast[1]	116
North Coast[1]	123
San Francisco Bay Region[1, 2]	97
SF Wholesale Customers	**88**

(1) Source: P. Gleick, testimony, August 23, 2007

(2) The San Francisco Bay Region includes all or portions of nine Bay Area counties

"Metropolitan Water District of Southern California decreased water use by 16% from 1990 to 2003 despite a 14% increase in population." (TRT, p.22)

- This statement is incomplete and misleading. It doesn't tell the whole story. Per capita water use in Southern California is higher than for San Francisco's wholesale customers, and is projected to remain higher in 2030.
- Per capita water use is projected to decrease in both Southern California and in the area served by San Francisco's wholesale customers.
- But today's per capita water use by San Francisco's wholesale customers is lower than Southern California's will be in the year 2030.[x]
    - Metropolitan Water District's projected gross per capita water use in 2030 is 191 gpcpd, higher than the current gross per capita in the wholesale customer area of 182 gpcpd.
    - In 1986, the gross per capita water use in Metropolitan Water District's service area was 200 gpcpd, 10% higher than for the wholesale customer area (182 gpcpd).
    - For the year 2030, Metropolitan Water District's projected gross per capita water use is 191 gpcpd, 20% higher than for the wholesale customer area (159 gpcpd).

"About 60% of the Tuolumne River is diverted for urban and rural uses." (TRT, Executive Summary, p. vi)

- This statement is incomplete and misleading. The Modesto (MID) and Turlock Irrigation (TID) Districts divert 47% of the water from Tuolumne River and the SFPUC diverts 12%. Of this 12%, approximately two-thirds, or 8%, is used by the wholesale customers.
- With the additional proposed 25 MGD diversion, SFPUC diversions will increase to 13% of the current total amount. Future increased diversions by MID/TID are unknown.
- Relevant comparisons between diverters of the Tuolumne River:
    - Current gross per capita water use in south Modesto is 273 gpcpd, 70% higher than in the wholesale customer area (161 gpcpd).[xi]
    - For future planning efforts, TID recently assumed 200 gpcpd, 25% higher than projected for the wholesale customer area (160 gpcpd).[xi]
    - Water use in the Modesto and Turlock area is not 100% metered, so customers do not pay based on how much water they individually use. In the areas receiving water from San Francisco, all customers pay for water based on metered usage, providing an incentive to conserve water.

---

[i] Source: "WSIP PEIR", CCSF, 2007; BAWSCA Annual Survey, FY 2001/2002; Projected Water Usage for BAWSCA Agencies", Brown and Caldwell, 2006
[ii] Source: "WSIP PEIR", CCSF, 2007; Projected Water Usage for BAWSCA Agencies", Brown and Caldwell, 2006
[iii] Source: "Projected Water Usage for BAWSCA Agencies", Brown and Caldwell, 2006
[iv] Source: "SFPUC Wholesale Customer Water Demand Projections", URS, 2004
[v] Source: "SFPUC Wholesale Customer Water Conservation Potential", URS, 2004
[vi] Source: "Projected Water Usage for BAWSCA Agencies", Brown and Caldwell, 2006
[vii] Source: WSIP PEIR, 2007 and BAWSCA Annual Survey, FY 2001/2002
[viii] Source: "Projected Water Usage for BAWSCA Agencies", Brown and Caldwell, 2006
[ix] Source: BAWSCA Annual Survey, FY 2005/2006
[x] Source: Regional Urban Water Management Plan (MWDSOC, November 2005) ; "Projected Water Usage for BAWSCA Agencies", Brown and Caldwell, 2006
[xi] Source: Turlock Irrigation District DEIR "Regional Surface Water Supply Project, EIP and Assoc., 2006.